

A robust electronic spot commodity market can break buyer cartels and ensure fair price to the farmer. A restrictive APMC Act, lack of basic infrastructure and inability to connect to people at the grass-root level are challenges

motion & Facilitation) Act, 2017 and

capping mandi taxes, and pegged the

commission agents' levy at 2 per cent

urged the States to adopt it.

perishables)

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hough the commodity derivatives exchange has been functioning for the last 14 years, India is yet to develop a national platform for spot commodity transactions, where the physical commodity is bought and sold at prevailing market prices.

In metals and other commodities, the producers are large corporates that are fairly well-equipped to fend for themselves, but in agri commodities, it is the gullible farmer who is exposed to the tough conditions in the primary agriculture markets (spot markets)

There are about 2,477 Agricultural Produce Market Committee (APMCs) and 4,843 sub-yards in the country.

The mechanism for price discovery in the mandis is non-transparent and farmer voices go mostly unheard.

Though on paper, the primary agriculture markets are governed by the State governments through the APMC, it is essentially the powerful traders and arhityas (commission agents) who control the market committee. Farmers cannot sell their produce outside the market, as the APMC Act prohibits it.

Sale of crops produced in the area notified under the market committee can be done only under the aegis of the APMC, through the licensed commission agents.

To break the trade cartels and ensure farmers get the right price, there is need for a pan-India electronic platform for agri commodities.

Today, many primary markets across the country do not even have pucca roads and electronic weighing machines.

A 2011 Planning Commission report also indicated that only 7 per cent of the total produce sold by farmers is graded before sale and that the storage capacity is only 30 per cent of what is required.

machines, as these are absolute necescountry trade.

pet scheme, eNAM (electronic National Agriculture Market) — an initicountry and establish one unified electronic spot market — is sadly a

470 mandis in 14 States have been integrated

mandis linked to the platform, trade is not fully online. It happens between buyers

and sellers physically present at the

Agriculture contributes 16 per cent to GDP today. Given its economic significance, it is time the powers-that-be take a closer look at the primary agriculture markets and set them right.

Karnataka is one State that has successfully established an online spot market for commodities. Solutions to some of the woes plaguing this segment can be found model. **APMC reforms** pending To integrate with eNAM. States have to amend APMC Act to provide electronic auction as a mode of price discovery; b) ensure single point of levy of market fees and c) permit one licence for a trader that is valid across all markets in

But if an electronic platform is built, it will bring all basic infrastructure, including assaying and grading sities in an online market where two parties from different corners of the

Prime Minister Narendra Modi's ative to connect mandis across the non-starter, even two years

after launch. So far, only eNAM.

A farmer producer organisation, Ulavan Producer Company in Erode Tamil Nadu, has a grading method that uses FT-NIR (near infrared) spectroscopy for turmeric. This reduces the testing time and can also be used for other spices as also vegetables

and fruits

the state. But so far,

only 14 states have

ture marketing reforms. Much before eNAM was launched, in the Karnataka tion Department.

bring in competition and give better price realisation to the farmers. It encouraged investments in warehousing infrastructure, and assaying and grading facilities. It also sought to give a single licence to traders and

Following this, the special purpose vehicle – Rashtriya e Market Services Private Limited (ReMS) — a joint venture between Karnataka Government and NCDEX e Markets was set up to

Today, ReMS' UMP (unified market platform) – the online market platform for agri commodities – links 163 mandis (of the 165) across Karnataka.

No grading/assaying facilities

A key challenge to online inter/intrastate trade in agri commodities is the absence of assurance on the quality of the commodity; one has to physically examine the stock to know the qual-

made the amendments. In others, eNAM is not even an option. Last year, in fact, the Centre introduced the Model Agricultural Produce and Livestock Marketing (Pro-

Along with single-point levy of a market fee and single licence for trade, it proposed delisting of fruits and vegetables from the APMC Act,

of the total transaction cost (for non-However, no State has so far implemented the recommendations in full

In July 2016, Maharashtra amended its APMC Act and allowed farmers to sell fruits and vegetables outside the APMC-notified area. In the following month itself, it introduced weekly markets where farmers could sell their produce directly to consumers.

However, reforms in the State have hit a road-

> Farmers/Farmer Producer Organisations (FPOs) in the State can establish private mandis. but buyers in these markets still have to pay the mandi fees to the APMC. Also, the State is yet to adopt

the Model APLM Act. The Uttar Pradesh Government too wanted to replace its five-decade-old APLM Act and the draft Bill got ready in February, but it is yet to see the light of day.

One State where APMC reforms have been fully implemented is

Karnataka is a pioneer in agricul-

the State had approved the draft Agricultural Marketing Policy, 2013, submitted by a panel, headed by Manoj Rajan, Additional Secretary, Coopera-

The policy's key objective was to simplify the licence issue procedure.

implement the reforms.

ity. If quality can be tested and validated by a reliable third-party, a buyer from outside the APMC or even outside the State can bid for the stock without second thoughts about quality.

Though the eNAM website has listed quality parameters for 69 commodities, including vegetables, its mandis are not equipped to do the assaying and

grading. Data gathered by the writer from officials of the implementing agency for **eNAM** who didn't want to named, that shows

many mandis their stock; the new still do not have Model APMC Act sorting and assaying allows this facility. Though the Centre provides funding to set up this facility, many of the 400-plus mandis connected to eNAM

today do not have the infrastructure for grading and assaying One key challenge with assaying is

that it requires large manpower.

At peak arrival season in mandis, post the harvest, assaying all the arrivals is difficult, especially for oilseeds (because oil content needs to be measured) or spices (as they are heterogeneous and sampling and testing takes long time).

In some cases, it is difficult to even assay a few hundred lots in a day, as the traditional process of assaying takes a lot of time. For instance, it takes more than six hours to assay each sample of turmeric, through the wet chemistry process to extract curcumin and test it in a spectrophotometer. So unless the testing time is reduced, it may not be possible to assay all the lots.

ReMS is working with C-DAC (Centre for Development of Advanced Computing), Kolkata for automation of the assaying process. As of now, C-DAC has developed two assaying machines, which scan the samples and give results in lesser time; they also sync data directly to the electronic

In Karnataka, inter-State trade is already in progress, as it has set up scientific quality testing

labs in 40 major mandis in the State. Samples are analysed as per Bureau of Indian Standards.

Around 2,000 traders have participated in If warehouses and cold multiple marstorages are declared as market kets in the State sub-yards, farmers do not have during the last to travel long distances with three years. Bulk buyers such as ADM Agro, Max Hyper Market, Campco, ITC, Cargill

> India, Godfrey Philips India, Pepsi Co India, Metro, Reliance etc. have also taken licences and transacted on the online platform.

Traders from Tamil Nadu, Andhra Pradesh, Kerala, Goa, Delhi and Maharashtra also have licences to trade in Karnataka.

No warehouses

Produce that can't be assayed and graded on the same day have to be stored. A graded stock gets the farmer better price, so he is prepared to wait, provided there is facility for warehousing. Also, during peak arrival seasons, if the farmer wants to hold his stock and wait for a better price, he needs a place to store his crops.

But the warehousing capacity available is very low. The combined capacity of FCI, CWC, SWC, the co-operative and private sector was 126.96 million tonnes in 2015-16, a chunk of which is filled with government's procurement stock.

The Central/State governments

Livestock Marketing Act, 2017 and urged States to adopt it. It proposed delisting of fruits and vegetables from the APMC Act and capping mandi taxes. However, no State has so far implemented the recommendations in need full spirit

to invest in building

infrawarehouse structure and assure proper connectivity through roads. They should promote private investment into warehousing through incentives.

Last year the Centre introduced the Model Agricultural Produce and

Once storage infrastructure is created, a farmer can get a loan by pledging the goods against the warehouse receipt.

This will ensure that he comes out of the clutches of the money lender, becomes a part of the formal banking system and is not put to stress during crop failures.

However, it is the traders who are the main beneficiaries of pledge financing, indicates a report of the Department of Economic Affairs, Ministry of Finance released in February.

Failing to educate the users

Building a national electronic platform is not just about introducing a new technology; it is also about moving millions of farmers and traders into a new system of buying and selling.

So, it is not enough to provide a bug-free software. You need to ensure that the stakeholders understand and approve it. This a key aspect that is missing in eNAM today.

While in markets such as Telangana and AP, where UMP was already in existence, the transition to eNAM was smooth, in others, it has been a challenge as the ground work for moving the users to the new system wasn't done meticulously.

Manoj Rajan, who spearheaded the ReMS initiative and continues to drive it, says the stakeholder education was key to the successful transition to

"Before implementation of reforms, market committees, farmers as also traders in markets, were explained the features of the reforms. Following this, the stakeholder education programmes were conducted to make participants understand the advantages of reforms.

"Stakeholders' views on customisation requirements in the platform were considered and incorporated in the UMP. Training programmes on automation of the process starting from the produce entering the market till it is out, was organised. A massive 'farmer registration programme' was also initiated, wherein farmers were registered on the platform with details such as name, address, mobile number and bank particulars," Manoj Rajan added.

UMP has shown how a spot market system can be set up successfully. If one leaves politics aside, there are learnings from the Karnataka model.

eNAM is a great initiative, undoubtedly, but for it to bear results, the gaps in implementation need to be plugged.

Farmers in Karnataka receive higher prices after UMP

NITI Aayog, in its report on 'Doubling Farmers' Income: Strategy & Prospects', acknowledged the success of the Unified Market Platform of ReMS. It said that after introduction of online trading in Karnataka in 2014-15, mandis witnessed much higher increase than the increase in wholesale prices of the same commodity in the country. The average increase in ten commodities, including, tur, green gram, black gram, bajra, copra, maize and turmeric was 38 per cent in nominal terms and 13 per cent in real terms

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Commodity	Prices received by farmers (₹ per quintal)		Increase in 2015-16 over 2013-14 (in %)	
	2013-14	2015-16	Nominal	Real*
Tur	3,939	7,672	95	16
Green gram	5,308	7,318	38	1
Black gram	3,817	7,976	109	12
Bajra	1,261	1,419	13	11
Copra	5,189	9,325	80	43
Turmeric	5,937	7,931	34	13
Jowar	1,492	1,774	19	6
Maize	1,257	1,356	8	6
Groundnut	3,398	4,346	28	14
Bengal gram	3,057	4,541	49	15

*real price computed after deflating with WPI of the commodity